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 Gly Phe Thr Leu Arg Pro Tyr Arg Met Ser Tyr Arg Glu Val Lys Tyr
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 Ser Lys Ala Ser Gly Lys Met Gly Met Arg Ala Val Val Tyr Tyr Met
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 Ile His Pro Gly Lys Gly Thr Lys Glu Asn Met His Arg Glu Gly Lys
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 Thr Arg Ile Thr Glu Glu Leu Val Pro Val Pro Gly Ser Val Asn Gly
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Leu	Ser	Arg	His	Glu	Leu	Lys	Asn	Arg	Asp	Val	Glu	Met	Gly	Asn	Ser	
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 <212> DNA
 <213> Homo sapiens

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 Leu Thr Tyr Arg Gln Ile Lys Tyr Phe Ser Phe Pro Gly Glu Leu Leu
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<211> 2654

<212> DNA

<213> Homo sapiens

<400> 11

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<211> 560

<212> PRT

<213> Homo sapiens

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Ile	Leu	Pro	Leu	Val	Val	Ser	Ser	Leu	Met	Ser	Gly	Leu	Ala	Ser	Leu
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Asp	Ala	Lys	Thr	Ser	Ser	Arg	Leu	Gly	Val	Leu	Thr	Val	Ala	Tyr	Tyr
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 <212> DNA
 <213> Homo sapiens

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Ala Leu Phe Ser Val His His Gln Pro Pro Ala Glu Lys Val Pro Glu
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Arg Lys Cys Gly Glu Ile Arg Glu Gln Tyr Gly Ile Gln Arg Val Glu
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 Val Asp Lys Val His Glu Arg Lys Cys Gly Ala Val Arg Glu Gln Tyr
 50 55 60
 Gly Ile Gln Arg Val Glu Ala Met Leu His Thr Leu Glu Arg Ile Asn
 65 70 75 80
 Ser Asp Pro Thr Leu Leu Pro Asn Ile Thr Leu Gly Cys Glu Ile Arg
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 Asp Ser Cys Trp His Ser Ala Val Ala Leu Glu Gln Ser Ile Glu Phe
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 Ile Arg Asp Ser Leu Ile Ser Ser Glu Glu Glu Glu Gly Leu Val Arg
 115 120 125
 Cys Val Asp Gly Ser Ser Ser Ser Phe Arg Ser Lys Lys Pro Ile Val
 130 135 140
 Gly Val Ile Gly Pro Gly Ser Ser Ser Val Ala Ile Gln Val Gln Asn
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 Leu Leu Gln Leu Phe Asn Ile Pro Gln Ile Ala Tyr Ser Ala Thr Ser
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 Met Asp Leu Ser Asp Lys Thr Leu Phe Lys Tyr Phe Met Arg Val Val
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 Pro Ser Asp Ala Gln Gln Ala Arg Ala Met Val Asp Ile Val Lys Arg
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 Tyr Asn Trp Thr Tyr Val Ser Ala Val His Thr Glu Gly Asn Tyr Gly
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Glu Ser Gly Met Glu Ala Phe Lys Asp Met Ser Ala Lys Glu Gly Ile
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 Cys Ile Ala His Ser Tyr Lys Ile Tyr Ser Asn Ala Gly Glu Gln Ser
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 Phe Asp Lys Leu Leu Lys Lys Leu Thr Ser His Leu Pro Lys Ala Arg
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 Val Val Ala Cys Phe Cys Glu Gly Met Thr Val Arg Gly Leu Leu Met
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 Ala Met Arg Arg Leu Gly Leu Ala Gly Glu Phe Leu Leu Leu Gly Ser
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 Asp Gly Trp Ala Asp Arg Tyr Asp Val Thr Asp Gly Tyr Gln Arg Glu
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 Asp Pro Glu Pro Ile Ala Ala Val Val Phe Ala Cys Leu Gly Leu Leu
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 595 600 605
 Val Val Lys Ser Ser Ser Arg Glu Leu Cys Tyr Ile Ile Leu Ala Gly
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Val	Arg	Ser	Ala	Phe	Thr	Thr	Ser	Thr	Val	Val	Arg	Met	His	Val	Gly
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Lys	Ser	Val	Thr	Trp	Ala	Gln	Asn	Glu	Lys	Ser	Ser	Arg	Gly	Gln	His
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Leu	Trp	Gln	Arg	Leu	Ser	Ile	His	Ile	Asn	Lys	Lys	Glu	Asn	Pro	Asn
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Gly Asp Ala Ala Arg Glu Ser Pro Ala Ala Gly Pro Glu Ala Ala Ala
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Ala Lys Pro Asp Leu Glu Glu Leu Val Ala Leu Thr Pro Pro Ser Pro
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Phe Arg Asp Ser Val Asp Ser Gly Ser Thr Thr Pro Asn Ser Pro Val
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<212> DNA

<213> Homo sapiens

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<211> 872

<212> PRT

<213> Homo sapiens

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Val Leu Gly Gly Leu Phe Pro Val His Gln Lys Gly Gly Pro Ala Glu
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Asp Cys Gly Pro Val Asn Glu His Arg Gly Ile Gln Arg Leu Glu Ala
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Met Leu Phe Ala Leu Asp Arg Ile Asn Arg Asp Pro His Leu Leu Pro
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Gly Val Arg Leu Gly Ala His Ile Leu Asp Ser Cys Ser Lys Asp Thr
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His Ala Leu Glu Gln Ala Leu Asp Phe Val Arg Ala Ser Leu Ser Arg
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Gly Ala Asp Gly Ser Arg His Ile Cys Pro Asp Gly Ser Tyr Ala Thr
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His Gly Asp Ala Pro Thr Ala Ile Thr Gly Val Ile Gly Gly Ser Tyr
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 435 440 445

Gly Ile Gly Arg Tyr Asn Ile Phe Thr Tyr Leu Arg Ala Gly Ser Gly
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<211> 4260

<212> DNA

<213> Homo sapiens

<400> 19

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<213> Homo sapiens

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Val Lys Pro Glu	Lys Val Val Gly	Val Ile Gly Ala	Ser Gly Ser Ser	145	150	155
Val Ser Ile Met	Val Ala Asn Ile	Leu Arg Leu Phe	Gln Ile Pro Gln	165	170	175
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Pro Gln Glu Arg	Lys Asp Arg Thr	Ile Asp Phe Asp	Arg Ile Ile Lys	260	265	270
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Gln Pro Lys Arg	Ala Thr Val Glu	Gly Phe Asp Ala	Tyr Phe Thr Ser	340	345	350
Arg Thr Leu Glu	Asn Asn Arg Arg	Asn Val Trp Phe	Ala Glu Tyr Trp	355	360	365

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 Asn Glu Ala Lys Pro Ile Gly Phe Thr Met Tyr Thr Thr Cys Ile Val
 785 790 795 800
 Trp Leu Ala Phe Ile Pro Ile Phe Phe Gly Thr Ala Gln Ser Ala Glu
 805 810 815
 Lys Leu Tyr Ile Gln Thr Thr Thr Leu Thr Ile Ser Met Asn Leu Ser
 820 825 830
 Ala Ser Val Ala Leu Gly Met Leu Tyr Met Pro Lys Val Tyr Ile Ile
 835 840 845
 Ile Phe His Pro Glu Leu Asn Val Gln Lys Arg Lys Arg Ser Phe Lys
 850 855 860
 Ala Val Val Thr Ala Ala Thr Met Ser Ser Arg Leu Ser His Lys Pro
 865 870 875 880
 Ser Asp Arg Pro Asn Gly Glu Ala Lys Thr Glu Leu Cys Glu Asn Val
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 Asp Pro Asn Ser Pro Ala Ala Lys Lys Lys Tyr Val Ser Tyr Asn Asn
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 Leu Val Ile
 915

<210> 27
 <211> 3321
 <212> DNA
 <213> Homo sapiens

<400> 27
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 tactggatcc tcacaatgat gcaaagaact cacagccagg agtatgccca ttccatacgg 180
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 gcaattgacc agattaacaa ggaccctgat ctctttcca acatcactct ggggtgccgc 360
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 gcattaatag agaaagatgc ttcggatgtg aagtgtgcta atggagatcc acccattttc 480
 accaagcccc acaagatttc tggcgctata ggtgctgcag caagctccgt gtccatcatg 540
 gttgctaaca ttttaagact ttttaagata cctcaaatca gctatgcac cacagcccca 600
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<210> 28

<211> 908

<212> PRT

<213> Homo sapiens

<400> 28

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Met Val Cys Glu Gly Lys Arg Ser Ala Ser Cys Pro Cys Phe Phe Leu
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Leu Thr Ala Lys Phe Tyr Trp Ile Leu Thr Met Met Gln Arg Thr His
      20              25              30

Ser Gln Glu Tyr Ala His Ser Ile Arg Val Asp Gly Asp Ile Ile Leu
      35              40              45

Gly Gly Leu Phe Pro Val His Ala Lys Gly Glu Arg Gly Val Pro Cys
      50              55              60

Gly Glu Leu Lys Lys Glu Lys Gly Ile His Arg Leu Glu Ala Met Leu
      65              70              75              80

Tyr Ala Ile Asp Gln Ile Asn Lys Asp Pro Asp Leu Leu Ser Asn Ile
      85              90              95

Thr Leu Gly Val Arg Ile Leu Asp Thr Cys Ser Arg Asp Thr Tyr Ala
      100              105              110

Leu Glu Gln Ser Leu Thr Phe Val Gln Ala Leu Ile Glu Lys Asp Ala
      115              120              125

Ser Asp Val Lys Cys Ala Asn Gly Asp Pro Pro Ile Phe Thr Lys Pro
      130              135              140

Asp Lys Ile Ser Gly Val Ile Gly Ala Ala Ala Ser Ser Val Ser Ile
      145              150              155              160

Met Val Ala Asn Ile Leu Arg Leu Phe Lys Ile Pro Gln Ile Ser Tyr
      165              170              175

Ala Ser Thr Ala Pro Glu Leu Ser Asp Asn Thr Arg Tyr Asp Phe Phe
      180              185              190

Ser Arg Val Val Pro Pro Asp Ser Tyr Gln Ala Gln Ala Met Val Asp
      195              200              205

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Ile Val Thr Ala Leu Gly Trp Asn Tyr Val Ser Thr Leu Ala Ser Glu
 210 215 220
 Gly Asn Tyr Gly Glu Ser Gly Val Glu Ala Phe Thr Gln Ile Ser Arg
 225 230 235 240
 Glu Ile Gly Gly Val Cys Ile Ala Gln Ser Gln Lys Ile Pro Arg Glu
 245 250 255
 Pro Arg Pro Gly Glu Phe Glu Lys Ile Ile Lys Arg Leu Leu Glu Thr
 260 265 270
 Pro Asn Ala Arg Ala Val Ile Met Phe Ala Asn Glu Asp Asp Ile Arg
 275 280 285
 Arg Ile Leu Glu Ala Ala Lys Lys Leu Asn Gln Ser Gly His Phe Leu
 290 295 300
 Trp Ile Gly Ser Asp Ser Trp Gly Ser Lys Ile Ala Pro Val Tyr Gln
 305 310 315 320
 Gln Glu Glu Ile Ala Glu Gly Ala Val Thr Ile Leu Pro Lys Arg Ala
 325 330 335
 Ser Ile Asp Gly Phe Asp Arg Tyr Phe Arg Ser Arg Thr Leu Ala Asn
 340 345 350
 Asn Arg Arg Asn Val Trp Phe Ala Glu Phe Trp Glu Glu Asn Phe Gly
 355 360 365
 Cys Lys Leu Gly Ser His Gly Lys Arg Asn Ser His Ile Lys Lys Cys
 370 375 380
 Thr Gly Leu Glu Arg Ile Ala Arg Asp Ser Ser Tyr Glu Gln Glu Gly
 385 390 395 400
 Lys Val Gln Phe Val Ile Asp Ala Val Tyr Ser Met Ala Tyr Ala Leu
 405 410 415
 His Asn Met His Lys Asp Leu Cys Pro Gly Tyr Ile Gly Leu Cys Pro
 420 425 430
 Arg Met Ser Thr Ile Asp Gly Lys Glu Leu Leu Gly Tyr Ile Arg Ala
 435 440 445
 Val Asn Phe Asn Gly Ser Ala Gly Thr Pro Val Thr Phe Asn Glu Asn
 450 455 460
 Gly Asp Ala Pro Gly Arg Tyr Asp Ile Phe Gln Tyr Gln Ile Thr Asn
 465 470 475 480
 Lys Ser Thr Glu Tyr Lys Val Ile Gly His Trp Thr Asn Gln Leu His
 485 490 495

Leu Lys Val Glu Asp Met Gln Trp Ala His Arg Glu His Thr His Pro
 500 505 510
 Ala Ser Val Cys Ser Leu Pro Cys Lys Pro Gly Glu Arg Lys Lys Thr
 515 520 525
 Val Lys Gly Val Pro Cys Cys Trp His Cys Glu Arg Cys Glu Gly Tyr
 530 535 540
 Asn Tyr Gln Val Asp Glu Leu Ser Cys Glu Leu Cys Pro Leu Asp Gln
 545 550 555 560
 Arg Pro Asn Met Asn Arg Thr Gly Cys Gln Leu Ile Pro Ile Ile Lys
 565 570 575
 Leu Glu Trp His Ser Pro Trp Ala Val Val Pro Val Phe Val Ala Ile
 580 585 590
 Leu Gly Ile Ile Ala Thr Thr Phe Val Ile Val Thr Phe Val Arg Tyr
 595 600 605
 Asn Asp Thr Pro Ile Val Arg Ala Ser Gly Arg Glu Leu Ser Tyr Val
 610 615 620
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 625 630 635 640
 Ala Ala Pro Asp Thr Ile Ile Cys Ser Phe Arg Arg Val Phe Leu Gly
 645 650 655
 Leu Gly Met Cys Phe Ser Tyr Ala Ala Leu Leu Thr Lys Thr Asn Arg
 660 665 670
 Ile His Arg Ile Phe Glu Gln Gly Lys Lys Ser Val Thr Ala Pro Lys
 675 680 685
 Phe Ile Ser Pro Ala Ser Gln Leu Val Ile Thr Phe Ser Leu Ile Ser
 690 695 700
 Val Gln Leu Leu Gly Val Phe Val Trp Phe Val Val Asp Pro Pro His
 705 710 715 720
 Ile Ile Ile Asp Tyr Gly Glu Gln Arg Thr Leu Asp Pro Glu Lys Ala
 725 730 735
 Arg Gly Val Leu Lys Cys Asp Ile Ser Asp Leu Ser Leu Ile Cys Ser
 740 745 750
 Leu Gly Tyr Ser Ile Leu Leu Met Val Thr Cys Thr Val Tyr Ala Asn
 755 760 765
 Lys Thr Arg Gly Val Pro Glu Thr Phe Asn Glu Ala Lys Pro Ile Gly
 770 775 780

Phe Thr Met Tyr Thr Thr Cys Ile Ile Trp Leu Ala Phe Ile Pro Ile
785 790 795 800

Phe Phe Gly Thr Ala Gln Ser Ala Glu Lys Met Tyr Ile Gln Thr Thr
805 810 815

Thr Leu Thr Val Ser Met Ser Leu Ser Ala Ser Val Ser Leu Gly Met
820 825 830

Leu Tyr Met Pro Lys Val Tyr Ile Ile Ile Phe His Pro Glu Gln Asn
835 840 845

Val Gln Lys Arg Lys Arg Ser Phe Lys Ala Val Val Thr Ala Ala Thr
850 855 860

Met Gln Ser Lys Leu Ile Gln Lys Gly Asn Asp Arg Pro Asn Gly Glu
865 870 875 880

Val Lys Ser Glu Leu Cys Glu Ser Leu Glu Thr Asn Thr Ser Ser Thr
885 890 895

Lys Thr Thr Tyr Ile Ser Tyr Ser Asn His Ser Ile
900 905

<210> 29

<211> 499

<212> DNA

<213> Rattus sp.

<400> 29

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caattttaa tgaattttct ccttaggatt attaatccaa cttaaaaaat tacttgataa 420
taatgattaa taaagatatg tgtagataat caatagctat taaatcttct aatttgtgtc 480
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<210> 30

<211> 1401

<212> DNA

<213> Rattus sp.

<400> 30

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ctggagcagt tgaaggctga gtgtcactac gtcaagggga gggagcatgt gtggagcgtg 180
accagattca tctataacca ggaagagttt gcccgtttg acagtgtctt tgggaagtgc 240
ctggcagtga ctgagctggg gcggcccata gctgagtact tgaacacca gaaggacatg 300

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ctggacaatt accgtgcctc tgtggacagg tgcagaaata actatgacct ggttgatatc 360
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<210> 31
 <211> 466
 <212> PRT
 <213> Rattus sp.

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 20 25 30
 Val Pro Val Pro Thr Ala Arg Phe Leu Glu Gln Leu Lys Ala Glu Cys
 35 40 45
 His Tyr Val Lys Gly Arg Glu His Val Trp Ser Val Thr Arg Phe Ile
 50 55 60
 Tyr Asn Gln Glu Glu Phe Ala Arg Phe Asp Ser Val Phe Gly Lys Phe
 65 70 75 80
 Leu Ala Val Thr Glu Leu Gly Arg Pro Ile Ala Glu Tyr Leu Asn Thr
 85 90 95
 Gln Lys Asp Met Leu Asp Asn Tyr Arg Ala Ser Val Asp Arg Cys Arg
 100 105 110
 Asn Asn Tyr Asp Leu Val Asp Ile Phe Met Ser Asn Leu Lys Ala Lys
 115 120 125
 Pro Lys Val Thr Val Tyr Pro Ser Lys Thr Gln Pro Leu Glu Tyr His
 130 135 140

Asn	Leu	Leu	Val	Cys	Ser	Val	Ser	Asp	Phe	Tyr	Pro	Gly	Thr	Ile	Glu	145	150	155	160
Ile	Arg	Trp	Phe	Arg	Asn	Gly	Glu	Glu	Glu	Lys	Thr	Gly	Val	Val	Ser	165	170		175
Thr	Asp	Leu	Ile	Ser	Asn	Gly	Asp	Trp	Thr	Tyr	Gln	Thr	Leu	Val	Met	180	185		190
Leu	Glu	Thr	Val	Pro	Gln	Gly	Gly	Glu	Val	Tyr	Thr	Cys	Gln	Val	Glu	195	200	205	
His	Pro	Ser	Leu	Thr	Ser	Pro	Val	Arg	Val	Glu	Trp	Arg	Ala	Arg	Ser	210	215	220	
Thr	Ser	Ala	Gln	Asn	Lys	Met	Leu	Ser	Gly	Ala	Met	Gly	Met	Ala	Leu	225	230	235	240
Gly	Leu	Phe	Ile	Leu	Ala	Val	Gly	Leu	Phe	Ile	Tyr	Leu	Arg	Asn	Leu	245	250		255
Arg	Glu	Ala	Ser	Leu	Asp	Lys	Glu	Leu	Tyr	Tyr	His	Gly	Glu	Pro	Leu	260	265		270
Asn	Val	Asn	Val	His	Val	Thr	Asn	Asn	Ser	Ala	Lys	Thr	Val	Lys	Lys	275	280	285	
Ile	Arg	Val	Ser	Val	Arg	Gln	Tyr	Ala	Asp	Ile	Cys	Leu	Phe	Ser	Thr	290	295	300	
Ala	Gln	Tyr	Lys	Cys	Pro	Val	Ala	Gln	Leu	Glu	Gln	Asp	Asp	Gln	Val	305	310	315	320
Ser	Pro	Ser	Ser	Thr	Phe	Cys	Lys	Val	Tyr	Thr	Ile	Thr	Pro	Leu	Leu	325	330		335
Ser	Asp	Asn	Arg	Glu	Lys	Arg	Gly	Leu	Ala	Leu	Asp	Gly	Gln	Leu	Lys	340	345	350	
His	Glu	Asp	Thr	Asn	Leu	Ala	Ser	Ser	Thr	Ile	Val	Lys	Glu	Gly	Ala	355	360	365	
Asn	Lys	Glu	Val	Leu	Gly	Ile	Leu	Val	Ser	Tyr	Arg	Val	Lys	Val	Lys	370	375	380	
Leu	Val	Val	Ser	Arg	Gly	Gly	Asp	Val	Ser	Val	Glu	Leu	Pro	Phe	Val	385	390	395	400
Leu	Met	His	Pro	Lys	Pro	His	Asp	His	Ile	Thr	Leu	Pro	Arg	Pro	Gln	405	410		415
Ser	Ala	Pro	Arg	Glu	Ile	Asp	Ile	Pro	Val	Asp	Thr	Asn	Leu	Ile	Glu	420	425		430

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Ala Arg Leu Arg Leu Lys Gly Met Lys Asp Asp Asp Cys Asp Asp Gln
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Phe Cys
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<210> 32
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 32
 gagcattggt gcagccagta 20

<210> 33
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 33
 gtctgagaac aagacaaagg 20

<210> 34
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 34
 ggtagaagcc tgctttaaac 20

<210> 35
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic primer

<400> 35
 ccaaggttct tcctcaacac 20

<210> 36
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic primer

<400> 36
 tgagagctgt caggagagc 19

<210> 37
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic primer

<400> 37
 ggcatgaatg aggaggccga c 21

<210> 38
 <211> 39
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic primer

<400> 38
 tatttaggtg acactatagg agcattggtg cagccagta 39

<210> 39
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 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 39

tatttaggtg acactatagg tctgagaaca agacaaagg

39

<210> 40

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 40

tatttaggtg acactatagg gtagaagcct gctttaaac

39

<210> 41

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 41

taatacgact cactataggg gccaaagggtc ttcctcaac

39

<210> 42

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 42

taatacgact cactataggg gtgagagctg tcaggagagc

40

<210> 43

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 43

taatacgact cactataggg gggcatgaat gaggaggccg ac

42

<210> 44

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 44

gagctggaca ccattgactc

20

<210> 45

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 45

gactgcgtct tggtcatttc

20

<210> 46

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 46

caacaccgaa tgcacgaaga catc

24

<210> 47

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
primer

<400> 47

atgagtgcaa ggtaactctg g

21

<210> 48

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
primer

<400> 48

tcacgtttcc aaggttcttc

20

<210> 49

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
primer

<400> 49

ccaatggaaa gtcagctgac tgca

24